# **Excessive Cigarette Consumption by Indonesian People and Economic Status in Indonesia**

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Keywords: Cigarette, Cigarette consumption, Poverty, Cigarette consumption a day, Smoker.

Abstract: Cigarette consumption in Indonesia has increased sevenfold, from 33 billion to 217 billion cigarettes.

Indonesia has producing cigarettes exceeding the maximum given by the tobacco industry roadmap in 2013. Some 332 billion stems have been produced by Indonesia, an excessive figure amounting to about 260 billion cigarettes (Tobacco Control Support Center, 2014). This study attempts to find a link between cigarette consumption in society by province and the economic status of Indonesians. Data in this study are taken from *Riskesdas* and *Susenas*. It is concluded that there is a downward trend in the country's poverty against the percentage of Indonesia based on province. In addition, it finds that the three provinces that had the highest have the average daily cigarette consumption in 2013 were Bangka Belitung Islands, with as many as 18.3 cigarettes each day, followed by South Kalimantan with as many as 16.7 cigarettes and,

finally, Riau with as many as 16.5 cigarettes each day.

#### 1 INTRODUCTION

Indonesia is the largest tobacco producer country in the world. The first tobacco plantation in Indonesia was in the 1800s when the Javanese were introduced by the Netherlands. After that, in the 1930s, they started producing cigarettes as rolled up with paper (Aliansi Tembakau Indonesia, 2013). From the 1970s to 2000s, the level of cigarette consumption in Indonesia has increased sevenfold from 33 billion stems producing 217 billion cigarettes. In 2008, consumption rose to 240 billion of cigarettes per year. With smokers in Indonesia numbering more than 60 million and cigarette consumption at 240 billion cigarettes each year, it can be calculated that the average daily cigarette consumption is 10.95 cigarettes (WHO, 2008).

Indonesia's cigarette production exceeds the maximum given by the tobacco industry in 2013. As many as 332 billion cigarettes have been produced by Indonesia, surpassing the limit set of 260 billion stems (Tobacco Control Support Center, 2014). A pack of cigarettes contains 16 cigarettes that, in bandrol at Rp 9.999, is considered too cheap (Tobacco Control Support Center, 2014) and is

considered to be the cause of continued increased occurrence of cigarette consumption in Indonesia every year. In 2001, it was noted that cigarette consumption in Indonesia was 182 billion cigarettes, but the figures for consumption the cigarette increased significantly by 2009s to 260.8 billion cigarettes (Tobacco Control Support Center, 2014).

The Tobacco Control Support Center stated that cigarette consumption in Indonesia increased significantly from 182 billion cigarettes in 2001 to 260.8 billion cigarettes in 2009. The increase in consumption was due to factors such as low s cigarette price, increased household income and population growth in Indonesia, which is ranked fourth largest in the world after China, the United States and Russia (Tobacco Control Support Center, 2014).

The purpose of this article is to know the pattern of cigarette consumption by the people of Indonesia in 2007, 2010 and 2013 and to know the economic status in Indonesia in that year. At the end of this article will be seen, whether the pattern of cigarette consumption by the community in every province in Indonesia will affect the economic status of the province.

### 2 METHOD

This research is descriptive research and aimed to know the numbers for cigarette consumption in Indonesia by province and economic status. Variables in this study include cigarette consumption by Indonesian society and economic status in Indonesia. The data used for this research are sourced from Riset Kesehatan Dasar (RISKESDAS) data for 2007, 2010, 2013 and

Survey Sosial Ekonomi Nasional (SUSENAS) data for 2007, 2010, 2013.

# 3 RESULTS

Data showed in this study obtained from some secondary data related to smoking and poverty in Indonesia. Result about smokers in which smoking more than 10 years Indonesia grouped by provinces in Indonesia in year 2007, 2010 and 2013.

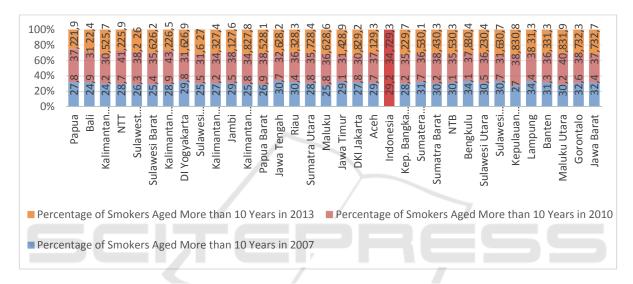


Figure 1: Distribution of Early Age Smokers in Indonesia year 2007, 2010, 2013.

Figure 1 showed that in 2007 the percentage of smokers in Indonesia by province is 29.2%, and then in 2010 the percentage increased becomes 34.7%. However in 2013 the percentage is decreased become 29.3%. Beside data related to smoking, distribution about poverty in Indonesian population also grouped by provinces in 2007, 2010, and 2013.

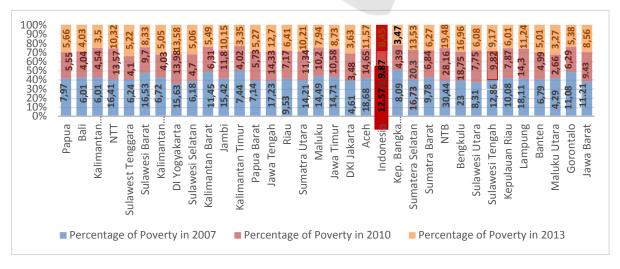


Figure 2: Poverty Distribution of Indonesian Population in 2007, 2010, 2013.

From Figure 2, it is known that the average distribution of poverty of Indonesia Population in 2007 was 12.57%, then in 2010 decreased become 9.87% and in 2013 decreased become 8.45%.

Figure 3 showed the average distribution of the number of cigarettes smoked daily in 2007 and 2013 by Province in Indonesia.

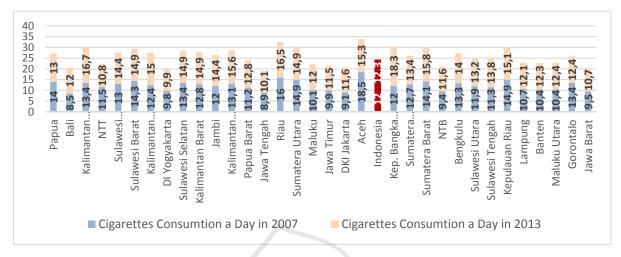


Figure 3: The average distribution of the number of cigarettes smoked daily in 2007 and 2013.

From the figure 3 it can be seen the distribution of cigarettes smoked each year in 2007 and 2013, in the average known in Indonesia in 2007 was 12 cigarettes a day, and in the year 2013 average of

cigarettes consumption a day increased a little bit become 12.3 cigarettes a day.

Figure 4 showed the percentage of people in Indonesia based on the number of their average cigarettes consumption in a day.

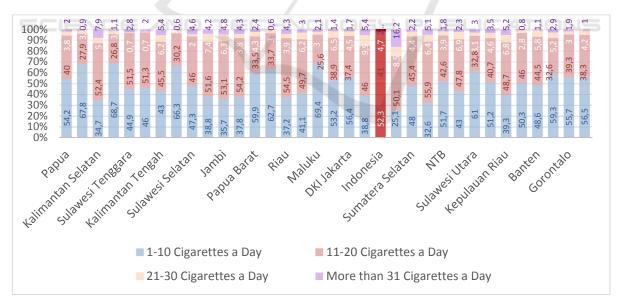


Figure 4: Distribution The average number of cigarettes smoked daily in 2010.

Figure 4 showed that the average number of cigarettes smoked every day in 2010 by province in Indonesia, it can be seen that as many as 52.3% of

Indonesian people consume cigarettes as much as 1-10 cigarettes a day.

## 4 DISCUSSION

From Figure 1.1, it can be seen that, in 2007, the percentage of the national population aged 10 years and over who smoked every day was as much as 29.2%. The highest percentage of smokers hest prevalence of smokers in 2010 was found in Central Kalimantan Province (43.2%), followed by East Nusa Tenggara (41.2%) and North Maluku (40.8%). In 2013, it is found that the average percentage of smokers in Indonesia is 29.3%) The three provinces having the highest percentage rate in 2013 are West Java (32,%), Gorontalo (32.3%) and North Maluku (31.9%).

Based on Figure 1.2, the incidence rate in 2007, the percentage of the national poverty rate was.5%. NTB province is the poorest province with 30.44%, followed by South Sumatera Province (20.3%) and Lampung Province (18.11%). In 2010, the poorest province in Indonesia is NTB with 28.16% followed by Bengkulu Province (18.75%) and South Sumatra (16.73%). In 2013, it can be seen that the national percentage was (8.45%, with the poorest provinces in Indonesia being NTB with as much as 19.48%, followed by Yogyakarta Province (13.58%) and South Sumatera Province (13, 53%).

From Figure 1.3, it can be seen that, in 2007, the average daily national consumption of cigarettes was as much as 12 cigarettes. The three provinces with the highest average daily cigarette consumption are Aceh Province with 18.5 cigarettes a day, followed by Riau Province with 16 cigarettes a day and South Sumatera Province and Province of Kepulauan Riau with an average daily consumption of 14.9 The national average cigarettes. cigarette consumption a day in 2013 was 12.3 cigarettes a day with the three provinces having the highest average daily cigarette consumption being Bangka Belitung Islands Province with as many as 18.3 stems, followed by South Kalimantan Province with as many as 16.7 stems and Riau Province with as many as 16.5 cigarettes a day.

From Figure 1.4 above is can be seen that, in 2010, the majority of Indonesia's population consumed cigarettes by as many as 1-10 stems with an average national percentage of 52.3%. The three provinces with the highest percentage for consumption of 1-10 cigarettes a day were Maluku Province (69.4%), East Nusa Tenggara (68.7%) and Bali Province (67.8%). In 2010, the national average percentage for cigarette consumption was 11-20 cigarettes per day (41%), where the three provinces with the largest percentage were West Sumatra (55.9%), East Kalimantan (54.2%) and Province

was found in Bengkulu Province (34.1%), followed by Lampung (34.4%) and Gorontalo (32.6%). National prevalence of smokers in 2010 was as much as 34.7%. The hig

South Kalimantan (52.4%). The national average percentage for cigarette consumption is 21-30 cigarettes a day (4.7%). The three provinces with the highest percentage of cigarette consumption of 21-30 cigarettes a day are Aceh Province (9.9%), Bangka Belitung Islands (8.5%) and West Kalimantan (7.4%). The national average percentage for cigarette consumption is more than 31 cigarettes a day (2.1%). Where there are three provinces with the highest percentage for cigarette consumption of more than 31 cigarettes a day, Bangka Belitung Islands (16.2%), South Kalimantan (7.9%) and Aceh (5.4%).

It can be seen that, in 2007, the highest percentage of smokers in Indonesia is found in Bengkulu Province (34.1%), Lampung (34.4%) and Gorontalo (32.6%). In the same year, NTB province is the poorest province with the highest percentage of poverty (30.44%), followed by South Sumatera Province (20.3%) and Lampung Province (18.11%). Then the three provinces with the highest average cigarette consumption are Aceh Province with as many as 18.5 cigarettes a day, followed by Riau Province with as many as 16 cigarettes a day, and the Province of South Sumatra and Riau Islands Province with average daily consumption of as many as 14.9 cigarettes.

In 2010, it can be seen that the highest prevalence of smokers in Indonesia was found in Central Kalimantan Province (43.2%), followed by East Nusa Tenggara (41.2%) and North Maluku (40.8%). Regarding the value of national poverty (9.87%), it is seen that the three provinces with the highest percentage of poverty are NTB (28.16%), followed by Bengkulu (18.75%) and South Sumatera Province (16.73%). For the national average percentage for cigarette consumption of 1-10 stems (52.3%), the province with the highest percentage of consumption is Maluku Province (69.4%). For the national average percentage for consumption of 11-20 cigarettes per day (41%), the province with the highest consumption percentage is West Sumatera Province (55.9%). Next is the average percentage for cigarette consumption of 21-30 cigarettes per day (4.7%) and the province with the highest consumption is Aceh (9.9%). The last is the national average percentage for cigarette consumption of more than 31 cigarettes

as day (2.1%), and the province with the highest percentage is the Province of Bangka Belitung Islands (16.2%).

# **5 CONCLUSIONS**

The national average cigarette consumption inhaled in 2007 and 2013 was as many as 12 cigarettes a day. Then it can be seen that, in 2010, the majority of Indonesia's population consumed as many as 1-10 cigarettes with an average national percentage of 52.3%. In 2010, the national average percentage for cigarette consumption of 11-20 cigarettes per day was 41% and the national percentage for cigarette consumption of 21-30 cigarettes per day was 4.7%. The national percentage for cigarette consumption of more than 31 cigarettes per day was2.1%. The average percentage for national consumption of 11-20 cigarettes a day (41%), is still very high. In 2010, the highest prevalence of smokers was in Central Kalimantan Province with a figure of 43.2%.

It can be seen that the pattern of the distribution of smokers by age  $\geq 10$  years for 2007 and 2013 tends to decrease, as there are 20 provinces that experience a decline rate from 2007 to 2013. Indonesia is a country with high cigarette consumption as can be seen from the results presented. The majority of provinces in Indonesia have a daily cigarette consumption that exceeds the national average. In 2007, there were 18 provinces with numbers exceeding the national average. From the above results, it can be concluded that the trend of daily cigarette consumption by province from 2007 to 2013 is one of increase, because there are 28 provinces found to that have increased daily cigarette consumption from 2007 to 2013, while, in 2010, it is found that the average daily cigarette nationwide is as many as 52.3%, with as many as 1-10 cigarettes a day.

For further research, data on household expenditure for cigarette consumption can be added in order to see the correlation between Indonesian cigarette consumption and its economic status.

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